New Fuel Economy and Environment Labels for a New Generation of Vehicles

Why New Label Designs?

The U.S. Department of Transportation joined with EPA today in unveiling new fuel economy and environment labels that, for the first time ever, highlight the increased efficiency standards achieved under the Obama Administration that will save families money at the pump starting this year. The new labels, which are the most dramatic overhaul in the history of the fuel economy label, will provide more comprehensive fuel efficiency information and five-year fuel costs or savings compared to the average vehicle, as well as environmental impact information.

The new labels underscore the benefits of the historic passenger car and light truck fuel economy and greenhouse gas emissions rule adopted under this administration in 2010 by the EPA and DOT, working closely with a wide array of stakeholders. The rule, which includes increased efficiency for vehicles in model year 2012 through 2016, will save 1.8 billion barrels of oil over the life of the program, while saving the average consumer \$3,000.

The redesigned Fuel Economy and Environment Label will provide the public with new information on vehicles' fuel economy, energy use, fuel costs, and environmental impacts. For the first time, comparable fuel economy and environmental ratings will be available for all new vehicles, including advanced technology vehicles such as electric cars. Starting with model year 2013, the improved fuel economy labels will be required to be affixed to all new passenger cars and trucks – both conventional gasoline powered and "next generation" cars, such as plug-in hybrids and electric vehicles. Automakers may also voluntarily adopt the new labels earlier for model year 2012 vehicles.

Specific features on the new Fuel Economy and Environment Label include:

- New ways to compare energy use and cost between new-technology cars that use electricity and conventional cars that are gasoline-powered.
- Useful estimates on how much consumers will save or spend on fuel over the next five years compared to the average new vehicle.
- Easy-to-read ratings of how a model compares to all others for smog emissions and emissions of pollution that contribute to climate change.
- An estimate of how much fuel or electricity it takes to drive 100 miles.
- Information on the driving range and charging time of an electric vehicle.
- A QR Code^{®1} that will allow users of smartphones to access online information about how various models compare on fuel economy and other environmental and energy factors.

In addition, a new interactive tool at www.fueleconomy.gov will allow drivers to enter their zip code and estimate the greenhouse gas emissions from charging and driving a plug-in hybrid or electric car where they live. The site www.fueleconomy.gov also enables drivers of all types of vehicles to enter personalized

¹ QR Code is registered trademark of DENSO WAVE INCORPORATED.

information like local gas prices along with individual driving habits to get best possible cost and energy-use estimates.

EPA and NHTSA conducted extensive research to inform the development of this new label. This includes reviewing input from an expert panel, focus groups, public hearings, and more than 6000 public comments. For more information on how the new label were developed, see www.epa.gov/otaq/carlabel/regulations.htm

What Information Will I See on the New Labels, and How Can It Help Me?

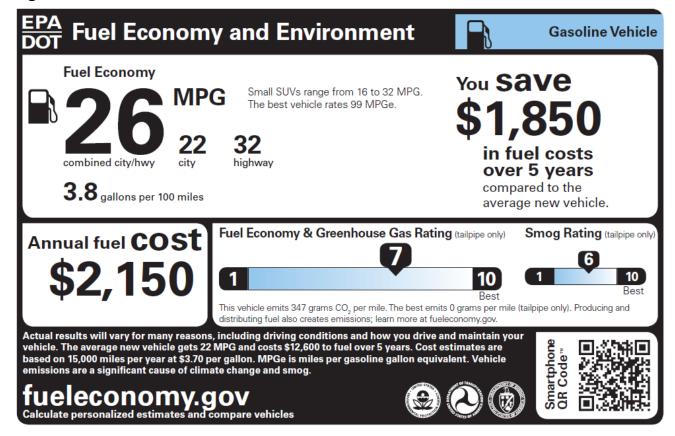
Labels for gasoline and diesel vehicles (see figure 1) will include:

- **Fuel Economy**: Miles per gallon (MPG) estimates. The combined City/Highway estimate is the most prominent to allow quick and easy comparison to other vehicles.
- Comparable Fuel Economy: Information to compare the vehicle's fuel economy to other vehicles in the same category (e.g., among all small SUVs) and to find out the highest fuel economy among all vehicles.
- **Fuel Consumption Rate**: The estimated rate of fuel consumption, in gallons per 100 miles, for combined city and highway driving. Unlike MPG, consumption relates directly to the amount of fuel used, and thus to fuel expenditures.
- Fuel Economy and Greenhouse Gas Rating: One-to-ten rating comparing the vehicle's fuel economy and tailpipe carbon dioxide (CO₂) emissions to those of all other new vehicles, where a rating of 10 is best.
- **CO₂ Emissions Information:** Tailpipe CO₂ emissions in grams per mile for combined city and highway driving and the emissions of the vehicle with lowest CO₂ emissions.
- Smog rating: A one-to-ten rating based on exhaust emissions that contribute to air pollution.
- **Fuel Costs**: An estimate of how much more (or less) the vehicle will cost to fuel over five years relative to the average new vehicle, as well as its estimated annual fuel cost.
- **Web site URL:** The web site, *www.fueleconomy.gov*, provides additional information and tools that allow consumers to compare different vehicles.
- **Smartphone interactive tool**: A symbol (also known as a QR Code^{®2}) that smartphones can read to reach a website that will provide additional and customizable information about the vehicle.

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 $^{^{\}rm 2}\,\mbox{QR}$ Code is registered trademark of DENSO WAVE INCORPORATED.

Figure 1. New Label — Gasoline Vehicles



Labels for advanced technology vehicles will include:

- **Driving Range**: Identifies how many miles EVs (electric vehicles), PHEVs (plug-in hybrid electric vehicles), FCVs (hydrogen fuel cell vehicles), and CNG (compressed natural gas) vehicles can drive before recharging or refueling.³
- Charge Time: Identifies the amount of time it takes to charge EV and PHEV batteries.
- **Different Modes**: Some vehicles, such as PHEVs, may have two or more different operating modes such as all-electric, blended gas and electric, and gasoline-only. The labels will provide certain information for different operating modes.
- **Fuel Economy:** The label shows fuel economy for advanced technology vehicles in miles per gallon of gasoline-equivalent (MPGe). A gallon of gasoline-equivalent means the number of kilowatt-hours of electricity, cubic feet of CNG, or kilograms of hydrogen that is equal to the energy in a gallon of gasoline.
- **Energy Consumption Measurement**: Fuel consumption is expressed as a unit of fuel purchased (e.g., kilowatt-hours) per 100 miles.

Additional consumer information and tools associated with the new labels are available at:www.fueleconomy.gov

³ Vehicle manufacturers may voluntarily include E85 range information on the labels for ethanol flexible fuel vehicles.

Figure 2. New Label — Electric Vehicles

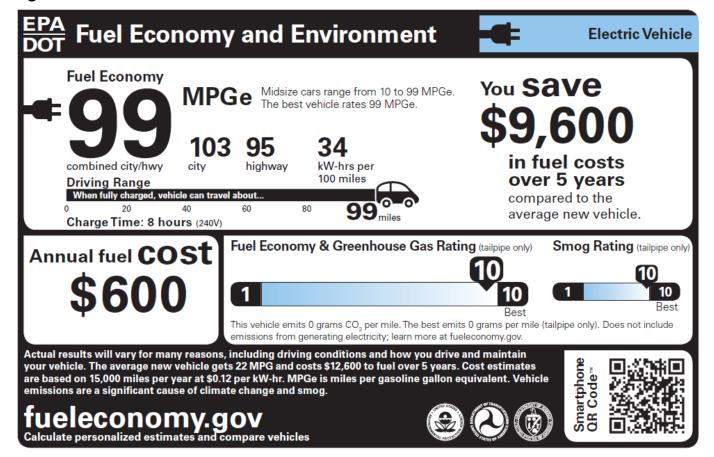
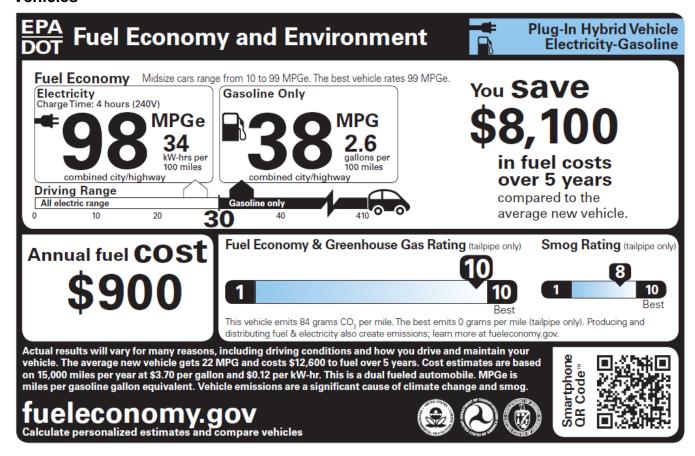


Figure 3. New Label — Plug-In Hybrid Vehicles⁴



Labels for advanced technology vehicles will include:

- **Driving Range**: Identifies how many miles EVs (electric vehicles), PHEVs (plug-in hybrid electric vehicles), FCVs (hydrogen fuel cell vehicles), and CNG (compressed natural gas) vehicles can drive before recharging or refueling.⁵
- Charge Time: Identifies the amount of time it takes to charge EV and PHEV batteries.
- **Different Modes**: Some vehicles, such as PHEVs, may have two or more different operating modes such as all-electric, blended gas and electric, and gasoline-only. The labels will provide certain information for different operating modes.
- **Fuel Economy:** The label shows fuel economy for advanced technology vehicles in miles per gallon of gasoline-equivalent (MPGe). A gallon of gasoline-equivalent means the number of kilowatt-hours of electricity, cubic feet of CNG, or kilograms of hydrogen that is equal to the energy in a gallon of gasoline.
- **Energy Consumption Measurement**: Fuel consumption is expressed as a unit of fuel purchased (e.g., kilowatt-hours) per 100 miles.

⁴ Label shown is for a PHEV that operates solely on electricity until the battery is depleted and then on gasoline. To see an example label for the other type of PHEV, see www.epa.gov/xxxx

⁵ Vehicle manufacturers may voluntarily include E85 range information on the labels for ethanol flexible fuel vehicles.

Additional consumer information and tools associated with the new labels are available at:www.fueleconomy.gov

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